

M/035/015

Permit No. UT0000051

Major Industrial

STATE OF UTAH
DIVISION OF WATER QUALITY
DEPARTMENT OF ENVIRONMENTAL QUALITY
SALT LAKE CITY, UTAH

AUTHORIZATION TO DISCHARGE UNDER THE
UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM
(UPDES)



In compliance with provisions of the *Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated ("UCA") 1953, as amended* (the "Act"),

Kennecott Utah Copper Corporation

is hereby authorized to discharge from its facility located near **Magna and in western Salt Lake County, Utah**, with the outfall(s) located at the following:

Outfall	latitude	and longitude	to receiving waters named
001	40°43'08"	112°05'10"	C-7 Ditch
002	40°44'10"	112°05'10"	C-7 Ditch
004	40°43'43"	112°12'19"	Unnamed drainage to Great Salt Lake
005	40°36'30"	111°55'20"	Jordan River
007	40°46'04"	112°05'40"	C-7 Ditch
008	40°43'06"	112°09'41"	West C-7 Ditch to Great Salt Lake
009	40°32'23"	112°11'26"	Pine Canyon Creek, Tooele County
010	40°29'23"	112°07'20"	Butterfield Creek
SW1	40°43'32"	112°12'11"	Unnamed drainage to Great Salt Lake
SW2	40°43'37"	112°11'26"	Unnamed drainage to Great Salt Lake
SW3	40°42'02"	112°06'38"	Little Valley Wash
SW4	40°32'52"	112°11'54"	Pine Canyon Creek, Tooele County

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on February 5, 1995.

This permit and the authorization to discharge shall expire at midnight, January 31, 2000.

Signed this 6th day of January, 1995.

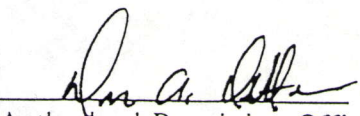

Authorized Permitting Official
Executive Secretary
Utah Water Quality Board

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I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Definitions.

1. The "30-day (and monthly) average" is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.
2. The "7-day (and weekly) average" is the arithmetic average of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains the Saturday.
3. "Daily Maximum" ("Daily Max.") is the maximum value allowable in any single sample or instantaneous measurement.
4. "Composite samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the composite sample period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
 - a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
 - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
 - c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,
 - d. Continuous collection of sample, with sample collection rate proportional to flow rate.
5. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
6. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
7. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent

caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

8. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
9. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
10. "Executive Secretary" means Executive Secretary of the Utah Water Quality Board.
11. "EPA" means the United States Environmental Protection Agency.
12. Acute Toxicity occurs when 50 percent or more mortality is observed for either test species at any effluent concentration.
13. "Act" means the "*Utah Water Quality Act*".
14. "Best Management Practices" ("*BMPs*") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. *BMPs* also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
15. "Coal pile runoff" means the rainfall runoff from or through any coal storage pile.
16. "CWA" means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
17. "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a *UPDES* permit (other than the *UPDES* permit for discharges from the municipal separate storm sewer) and discharges from fire fighting activities, fire hydrant flushings, potable water sources including waterline flushings, uncontaminated ground water (including dewatering ground water infiltration), foundation or footing drains where flows are not contaminated with process materials such as solvents, springs, riparian habitats, wetlands, irrigation water, exterior building washdown where there are no chemical or abrasive additives, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred and where detergents are not used, and air conditioning condensate.
18. "Landfill" means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.
19. "Land application unit" means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.
20. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock,

concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agriculture storm water runoff.

21. "Runoff coefficient" means the fraction of total rainfall that will appear at a conveyance as runoff.
22. "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; hazardous substances designated under *Section 101(14)* of *CERCLA*; any chemical the facility is required to report pursuant to *EPCRA Section 313*; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
23. "Significant spills" includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under *Section 311* of the *Clean Water Act* (see *40 CFR 110.10* and *40 CFR 117.21*) or *Section 102* of *CERCLA* (see *40 CFR 302.4*).
24. "Storm water" means storm water runoff, snow melt runoff, and surface runoff and drainage.
25. "Waste pile" means any noncontainerized accumulation of solid, nonflowing waste that is used for treatment or storage.
26. "10-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable reoccurrence interval of once in 10 years. This information is available in *Weather Bureau Technical Paper No. 40*, May 1961 and *NOAA Atlas 2*, 1973 for the 11 Western States, and may be obtained from the National Climatic Center of the Environmental Data Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

B. Description of Discharge Point(s).

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a UPDES permit is a violation of the *Act* and may be subject to penalties under the *Act*. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge may be subject to criminal penalties as provided under the *Act*.

Outfall Number Location of Discharge Point(s)

001	Latitude 40° 43' 08" Longitude 112° 05' 10"	Tailings clarification canal outfall
002	Latitude 40° 44' 10" Longitude 112° 05' 10"	Tailings pond outfall to C-7 ditch
004	Latitude 40° 43' 43" Longitude 112° 12' 19"	Spring and smelter area storm water
005	Latitude 40° 36' 30" Longitude 111° 55' 20"	Alternate mine water discharge to the Jordan River
007	Latitude 40°46'04" Longitude 112°05'40"	Toe Ditch Pond to C-7 ditch
008	Latitude 40°43'06" Longitude 112°09'41"	Artesian well water, refinery storm water to West C-7 ditch

009	Latitude 40°32'23" Longitude 112°11'36"	Pine Canyon Tunnel, Tooele County
010	Latitude 40°29'23" Longitude 112°07'20"	Butterfield Tunnel to Butterfield Creek
103	Latitude 40° 43' 30" Longitude 112° 9' 30"	An internal discharge from the smelter, refinery WWTP
104	Latitude 40°43'27" Longitude 112°11'50"	Internal discharge from Hyrometallurgical plant
105	Latitude 40°43'25" Longitude 112°10'03"	Sewage plant discharge to Outfall 008 or Concentrators
SW1	Latitude 40°43'32" Longitude 112°12'11"	Smelter west storm waster to unnamed drainage
SW2	Latitude 40°43'37" Longitude 112°11'26"	Smelter east storm water to unnamed drainage
SW3	Latitude 40°42'02" Longitude 112°06'38"	Storm water to Little Valley Wash
SW4	Latitude 40°32'52" Longitude 112°11'54"	Storm water to Pine Canyon Drainage

C. Narrative Standard.

It shall be unlawful, and a violation of this permit, for the permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste, or conditions which produce undesirable aquatic life or which produces objectionable tastes in edible aquatic organisms; or concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures.

D. Specific Limitations and Self-monitoring Requirements.

1. During the period beginning immediately and lasting through the duration of this permit, the permittee is authorized to discharge from Outfalls Serial Numbers 001, 002, and 007 (tailings impoundment). Such discharge shall be limited and monitored by the permittee as specified below except as allowed by the storm provisions in Part I.D.11.:

<u>Effluent Characteristics</u>	<u>Discharge Limitation ^{a/}</u>		<u>Monitoring Requirements</u>	
	<u>Concentration</u>		<u>Measurement</u>	<u>Sample</u>
	<u>Average</u>	<u>Daily Max.</u>	<u>Frequency</u>	<u>Type</u>
Flow, MGD	N.A.	N.A.	Daily	Continuous
Total suspended Solids, mg/L	20	30	2 x Week ^{b/}	Composite
Total Cadmium, mg/L	0.05	0.1	2 x Week ^{b/}	Composite
Total Copper, mg/l	0.15	0.30	2 x Week ^{b/}	Composite
Total Iron, mg/L	N.A.	N.A.	2 x Week ^{b/}	Composite
Total Lead, mg/L	0.30	0.60	2 x Week ^{b/}	Composite
Total Mercury, mg/L	0.001	0.002	2 x Week ^{b/}	Composite
Total Zinc, mg/L	0.50	1.0	2 x Week ^{b/}	Composite
Total Arsenic, mg/L	0.25	0.50	2 x Week ^{b/}	Composite
Total Nickel, mg/L	N.A.	N.A.	2 x Week ^{b/}	Composite
Total Cyanide, mg/L	0.1	0.2	2 x Week ^{b/}	Composite
Total Phenolics, mg/L	N.A.	0.3	Monthly	Composite
Total Dissolved Solids, mg/L	N.A.	N.A.	Monthly	Composite
Oil and Grease, mg/L	N.A.	10	Monthly ^{c/}	Grab

The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units in any sample and shall be monitored twice per week by a grab sample.^{b/}

There shall be no untreated sanitary wastewater discharged into the tailings impoundment.
There shall be no visible sheen or floating solids or visible foam in other than trace amounts.

^{a/} See Definitions, *Part I.A* for definition of terms. N.A. - Not Applicable.

^{b/} Measurement frequency is only required weekly when the Sunday through Thursday average flow is less than 1 MGD and the total flow for the week is less than 10 MGD for that discharge.

^{c/} Sample oil and grease quarterly unless a sheen or other oil condition is observed.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: at the outfall to the C-7 ditch prior to mixing with the receiving stream.

2. When the monthly average discharge flow from the tailings impoundment exceeds 10 MGD, the monthly average recycle rate from the tailings pond is to be 37 MGD or equal to the concentrator flow rate to the tailings pond when the discharge rate to the tailings is less than 37 MGD. The sum of the monthly average concentrator flows to the tailings impoundment is not to exceed the recycle rate by more than 18 MGD.

3. Effective immediately, and lasting through the life of this permit, there shall be no acute toxicity in the 001, 002, or 005 discharges as defined in *Part I.A* and determined by test procedures described in *Part I.D.12* of this permit.
4. Effective immediately the permittee is authorized to discharge from Outfalls 103 and 104 when the monthly average sulfuric acid production is less than 3.5×10^6 lbs/day.

The sum of such discharges lbs/day shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Tier One Discharge Limitations a/</u>		<u>Monitoring Requirements</u>	
	<u>Average</u> <u>30-Day</u>	<u>Daily</u> <u>Maximum</u>	<u>Measurement</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>
Flow, MGD	N/A	N/A	Continuous	Recorder
Total Sus. Solids, lbs/day	506	1012	2 x Week <u>b</u> /	Composite
Total Copper, lbs/day	4.98	10.5	2 x Week <u>b</u> /	Composite
Total Lead, lbs/day	1.05	2.23	2 x Week <u>b</u> /	Composite
Total Cadmium, lbs/day	0.61	1.53	2 x Week <u>b</u> /	Composite
Total Zinc, lbs/day	3.43	8.69	2 x Week <u>b</u> /	Composite
Total Arsenic, lbs/day	4.68	11.4	2 x Week <u>b</u> /	Composite
Fecal Colif, No./100 MI	200	250 <u>c</u> /	Weekly	Grab
Total Colif, No./100 MI	2000	2500 <u>c</u> /	Weekly	Grab

a,b,c, see part I.5. Sample location and calculation as per part I. 5.

5. Effective after notification as per *UAC R317-8-4.3(2)(d)* the permittee is authorized to discharge from Outfalls 103 and 104 when the monthly average sulfuric acid production capacity is greater than 3.5×10^6 lbs/day.

The sum of such discharges lbs/day shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Tier Two Discharge Limitations a/</u>		<u>Monitoring Requirements</u>	
	<u>Average</u> <u>30-Day</u>	<u>Daily</u> <u>Maximum</u>	<u>Measurement</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>
Flow, MGD	N/A	N/A	Continuous	Recorder
Total Sus. Solids, lbs/day	237	296	2 x Week <u>b</u> /	Composite
Total Copper, lbs/day	12.1	25.3	2 x Week <u>b</u> /	Composite
Total Lead, lbs/day	2.56	5.51	2 x Week <u>b</u> /	Composite
Total Cadmium, lbs/day	1.57	3.93	2 x Week <u>b</u> /	Composite
Total Zinc, lbs/day	8.26	20.1	2 x Week <u>b</u> /	Composite
Total Arsenic, lbs/day	11.3	27.5	2 x Week <u>b</u> /	Composite
Fecal Colif, No./100 MI	200	250 <u>c</u> /	Weekly	Grab
Total Colif, No./100 MI	2000	2500 <u>c</u> /	Weekly	Grab

a/ See definitions Part I.A. for definition of terms

b/ Measurement frequency is only required weekly when the Sunday through Thursday average flow is less than 1 MGD and the total flow for the week is less than 10 MGD.

c/ Maximum 7-day average.

Samples taken in compliance with monitoring requirements for outfalls 103 and 104 except coliforms shall be taken at the outfall to the C-7 ditch and prior to mixing with the receiving waters. Coliform sampling shall be at existing 103 as long as sanitary waste is treated there. Coliform sampling shall not be required at 104.

Mass limitations shall be calculated by multiplying the combined 103 and 104 flow by the ratio of tailings impoundment wastewater discharge rate divided by the total wastewater inflow to the tailings impoundment. The ratio for calculation shall not exceed 1. Then multiplied by the tailings impoundment discharge concentrations.

6. Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfall 105. Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Discharge Limitations a/</u>		<u>Monitoring Requirements</u>	
	<u>Average</u>	<u>30-Day 7-Day</u>	<u>Measurement</u>	<u>Sample</u>
			<u>Frequency</u>	<u>Type</u>
BOD ₅ , mg/L <u>b/</u>	25	35	Weekly <u>c/</u>	Grab
Total Suspended Solids, mg/L <u>b/</u>	25	35	Weekly <u>c/</u>	Grab
Fecal Coliform, no./100mL	200	250	Weekly <u>c/</u>	Grab
Total Coliform, no./100mL	2000	2500	Weekly <u>c/</u>	Grab
Residual Chlorine	N.A.	N.A.	Weekly <u>c/</u>	Grab

a/ See Definitions, *Part I.A* for definition of terms.

b/ Percentage Removal Requirements (Total Suspended Solids (TSS), Biochemical Oxygen Demand (BOD₅) Limitation): In addition to the concentration limitation on TSS and BOD₅ or CBOD₅ indicated above, the arithmetic mean for the TSS and BOD₅ concentration for effluent samples collected in a period of thirty (30) consecutive days shall not exceed fifteen (15) percent of the arithmetic mean of the concentration for influent samples collected at approximately the same times during the same period (85 percent removal). An exception to the 85% removal requirement may be allowed by the Executive Secretary, if requested and weak inflow concentrations make such removal infeasible.

c/ Monitoring frequency may be reduced to monthly after one quarter of continued compliance and the average flow is less than 0.25 MGD.

7. During the period beginning immediately and lasting through the duration of this permit, the permittee is authorized to discharge from Outfalls 004, 008 and 009 for waters described in the Statement of Basis. Outfall 004 shall be monitored quarterly by grab samples for the same parameters as specified in the permit for outfall 001 except not sampled for cyanide, phenolics, and biomonitoring. The 008 discharge shall be limited and monitored quarterly by grab samples as specified in the permit for outfall 001 except not sampled for cyanide, phenolics, and biomonitoring. In addition the total dissolved solids shall not exceed 8000 mg/L. Outfall 009 shall be limited and monitored every six months by grab samples as specified in the permit for outfall 001 except not sampled for cyanide, phenolics, and biomonitoring.

8. During the period beginning immediately and lasting through the duration of this permit, the permittee is authorized to discharge from Outfall 005 (mine water). The discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Discharge Limitations a/</u>		<u>Monitoring Requirements</u>	
	<u>30-day</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	<u>Measurement</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>
Flow, MGD	N.A.	5.0	Daily or cont.	measured b/
Total Sus. Solids, mg/L	20	30	2 x Week	Grab
Total Cadmium, mg/L	0.034	0.042	2 x Week	Grab
Total Copper, mg/L	0.15	0.30	2 x Week	Grab
Total Lead, mg/L	0.178	0.60	2 x Week	Grab
Total Mercury, mg/L	0.00017c/	0.002	2 x Week	Grab
Total Zinc, mg/L	0.75	1.50	2 x Week	Grab
Total Arsenic, mg/L	N.A.	0.23	2 x Week	Grab
Total Iron, mg/L	N.A.	4.0	2 x Week	Grab
Total Dissolved Solids, mg/L	N.A.	3600	2 x Week	Grab
Oil & Grease, mg/L	N.A.	10	Monthlyd/	Grab

The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units and shall be monitored twice per week by a grab sample.

a/ See definitions Part I.A. for definition of terms

b/ For intermittent discharges, the duration of the discharge shall be reported.

c/ The permittee shall report down to the instrument detection level on the monthly DMR but will not be in violation unless a value of 0.0002 mg/L or greater is detected.

d/ Only sample oil and grease if a sheen or other oil condition is observed.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

There shall be no discharge of sanitary wastes or leach water from this outfall.

During the first week of discharge, aluminum, selenium, and silver shall also be sampled and the analyses submitted with the first discharge report. A silver concentration of 0.002 will indicate a need for further analysis.

9. During the period beginning immediately and lasting through the duration of this permit, the permittee is authorized to discharge from Outfall 010 (Butterfield Tunnel). The discharge shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristics</u>	<u>Discharge Limitations a/</u>		<u>Monitoring Requirements</u>	
	<u>30-day Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow, MGD	N.A.	N.A.	quarterly	measured
Total Sus. Solids, mg/L	20	30	quarterly	Grab
Total Cadmium, mg/L	0.005	0.015	quarterly	Grab
Total Copper, mg/L	0.087	0.147	quarterly	Grab
Total Iron, mg/L	N.A.	2.20	quarterly	Grab
Total Lead, mg/L	0.032	0.10	quarterly	Grab
Total Mercury, mg/L	0.00002c/	0.002	quarterly	Grab
Total Zinc, mg/L	0.56	0.62	quarterly	Grab
Total Arsenic, mg/L	N.A.	0.10	quarterly	Grab
Total Selenium, mg/L	0.0075	0.030	quarterly	Grab
Total Dissolved Solids, mg/L	N.A.	1200	quarterly	Grab
Oil & Grease, mg/L	N.A.	10	quarterly b/	Grab

The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units and shall be monitored monthly by a grab sample.

a/ See definitions Part I.A. for definition of terms

b/ Sample oil and grease only when a sheen is observed or there is another reason to believe oil is present.

c/ The permittee shall report down to the instrument detection level on the monthly DMR but will not be in violation unless a value of 0.0002 mg/L or greater is detected.

10. Except as provided for in Part I.D.11b of the permit, there shall be no discharge of process wastewater to navigable water from the copper dump leach operations or process water at SW3.

11. Storm Exemptions

- a. If, as a result of precipitation or snowmelt Outfalls 001 and/or 002 has an overflow or excess discharge of effluent which does not meet the limitations contained in Part I.D.1., Outfalls 001 and/or 002 may qualify for an exemption from such limitations if the following conditions are met.

- (1) The existing tailings pond and clarification channel have a total pool volume at the time of the precipitation or snowmelt discharge in excess of 473 acre feet. The North expansion will require a volume in excess of 524 acre feet. When both tailings areas are discharging the pool volume must exceed the sum of the two areas contributing runoff.
- (2) Concentrator water is being recycled to the process operations so that the average is 37 MGD or equal to the concentrator flow rate to the tailings pond. The sum

of the monthly average concentrator flows to the tailings impoundment is not to exceed the recycle rate by more than 18 MGD.

- (3) The permittee takes all reasonable steps to maintain treatment of the waste water such as adding lime to maintain pH in the range of 6.5 to 9.0 in the tailings impoundment and minimizes the amount of overflow such as not discharging leach water to the tailings pond except for storm runoff at the mine exceeding the 10 year 24-hour storm volume and the conditions of Part I.D.11.b.
 - (4) The discharges are analyzed for the parameters listed in part 1D1.
 - (5) The storm exemption is designed to provide an affirmative defense to an enforcement action. Therefore, the permittee has the burden to demonstrate that the above conditions have been met.
- b. If, as a result of precipitation or snowmelt, the Copper Dump Leach Operations or SW3 have an overflow or discharge which violates Part I.D.10, the permittee may qualify for an exemption from such limitations with respect to such discharge if the following conditions are met:
- (1) The facility is designed, constructed, and maintained to contain the maximum volume of waste water stored and contained by the facility during normal operating conditions without an increase in volume from precipitation and the maximum volume of waste water resulting from a 10-year, 24-hour precipitation event. In computing the maximum volume of waste water which would result from a 10-year, 24-hour precipitation event, the permittee must include the volume which would result from all areas contributing runoff to the individual treatment facility, i.e., all runoff that is not diverted from the area, or process subject to zero discharge, and other runoff that is allowed to commingle with the influent to the treatment system.
 - (2) The permittee takes all reasonable steps to minimize the overflow or excess discharge such as containment and reuse where practical.
 - (3) There is no discharge of leach water to Bingham Creek or the Jordan River.
 - (4) The permittee complies with the notification requirements of the permit. The storm exemption is designed to provide an affirmative defense to an enforcement action. Therefore, the operator has the burden of demonstrating to the appropriate authority that the above conditions have been met.

12. Whole Effluent - Acute Toxicity.

Starting on the effective date of this permit, the permittee shall quarterly, conduct acute static replacement toxicity tests on composite samples of the final effluents. The samples shall be collected at outfalls 001, 002, and 005. Sampling is not required if the maximum weekly average flow has not exceeded 1 MGD. A biomonitoring test is also required for outfall 010 by April 30, 1995.

The monitoring frequency for acute tests shall be quarterly unless a sample is found to be acutely toxic during a routine test. If that occurs, the monitoring frequency shall become weekly (See *Part I.D.13, Accelerated Testing*). Samples shall be collected on a two day progression; i.e., if the first sample is on a Monday, during the next sampling period, the sampling shall begin on a Wednesday, etc.

The replacement static acute toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition, EPA/600/4-90/027 (September 1991)* and the *Region VIII EPA NPDES Acute Test Conditions - Static Renewal Whole Effluent Toxicity Tests (7/2/93)*. In the case of conflicts, the Region VIII procedures will prevail. The permittee shall conduct the 48-hour static replacement toxicity test using a Ceriodaphnia species.

Acute toxicity occurs when 50 percent or more mortality is observed for the species at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the results to be considered valid. If more than 10 percent control mortality occurs, the test shall be repeated until satisfactory control mortality is achieved. A variance to this requirement may be granted by the Executive Secretary if a mortality of less than 10 percent was observed in higher effluent dilutions.

Quarterly test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting calendar month the outfall is sampled. The format for the report shall be consistent with the latest revision of the *Region VIII Guidance for Acute Whole Effluent Reporting (7/2/93)* and shall include all chemical and physical data as specified.

13. Accelerated Testing.

When acute toxicity is indicated during routine biomonitoring as specified in this permit, the permittee shall notify the Executive Secretary in writing within 5 days after becoming aware of the test result. The permittee shall perform an accelerated schedule of biomonitoring to establish whether a pattern of toxicity exists. Accelerated testing will begin within seven days after the permittee becomes aware of the test result. Accelerated testing shall be conducted as specified under *Part I.D.14, Pattern of Toxicity*. If the accelerated testing demonstrates no pattern of toxicity, routine monitoring shall be resumed.

14. Pattern of Toxicity.

A pattern of toxicity is defined by the results of a series of up to five biomonitoring tests pursuant to the accelerated testing requirements using 100 percent effluent on the single species found to be more sensitive, once every week for up to five consecutive weeks.

If two (2) consecutive tests (not including the scheduled quarterly or monthly test which triggered the search for a pattern of toxicity) do not result in acute toxicity, no further accelerated testing will be required and no pattern of toxicity will be found to exist. The permittee will provide written verification to the Executive Secretary within 5 days, and resume routine monitoring.

A pattern of toxicity is established if one of the following occurs:

1. If two (2) consecutive test results (not including the scheduled quarterly or monthly test which triggered the search for a pattern of toxicity) indicate acute toxicity, this constitutes an established pattern of toxicity.
 2. If consecutive tests continue to yield differing results each time, the permittee will be required to conduct up to a maximum of five (5) acute tests (not including the scheduled quarterly or monthly test which triggered the search for a pattern of toxicity). If three out of five test results indicate acute toxicity, this will constitute an established pattern of toxicity.
15. Preliminary Toxicity Investigation.
1. When a pattern of toxicity is detected the permittee will notify the Executive Secretary in writing within 5 days and begin an evaluation of the possible causes of the toxicity. The permittee will have 15 working days from demonstration of the pattern of toxicity to complete a Preliminary Toxicity Investigation (PTI) and submit a written report of the results to the Executive Secretary. The PTI may include, but is not limited to, additional chemical and biological monitoring, examination of pretreatment program records, examination of discharge monitoring reports, a thorough review of the testing protocol, evaluation of treatment processes and chemical use, inspection of material storage and transfer areas to determine if a spill may have occurred, and similar procedures.
 2. If the PTI identifies a probable toxicant and/or a probable source of toxicity, the permittee shall submit, as part of its final results, written notification of that effect to the Executive Secretary. Within thirty days of completing the PTI the permittee shall submit for approval a control program to control effluent toxicity and shall proceed to implement such plan within seven days following approval. The control program, as submitted to or revised by the Executive Secretary, may be incorporated into the permit.
 3. If no probable explanation for toxicity is identified in the PTI, the permittee shall notify the Executive Secretary as part of its final report, along with a schedule for conducting a Phase I Toxicity Reduction Evaluation (TRE) (See *Part I.D.16, Toxicity Reduction Evaluation*).
 4. If toxicity spontaneously disappears during the PTI, the permittee shall submit written notification to that effect to the Executive Secretary as part of the reporting requirements of paragraph 1 of this section.
16. Toxicity Reduction Evaluation (TRE).

If toxicity is detected during the life of this permit, and it is determined by the Executive Secretary that a TRE is necessary, the permittee shall be so notified and shall initiate a TRE immediately thereafter. The purpose of the TRE will be establish the cause of the toxicity, locate the source(s) of the toxicity, and control or provide treatment for the toxicity.

A TRE may include but is not limited to one, all, or a combination of the following:

1. Phase I - Toxicity Characterization

2. Phase II - Toxicity Identification Procedures
3. Phase III - Toxicity Control Procedures
4. Any other appropriate procedures for toxicity source elimination and control

If the TRE establishes that the toxicity cannot be immediately eliminated the permittee shall submit a proposed compliance plan to the Executive Secretary. The plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control. If the approach and schedule are acceptable to the Executive Secretary, this permit may be reopened and modified.

If the TRE shows that the toxicity is caused by a toxicant(s) that may be controlled with specific numerical limitations, the permittee may:

1. Submit an alternative control program for compliance with the numerical requirements.
2. If necessary, provide a modified biomonitoring protocol which compensates for the pollutant(s) being controlled numerically.

If acceptable to the Executive Secretary, this permit may be reopened and modified to incorporate any additional numerical limitations, a modified compliance schedule if judged necessary by the Executive Secretary, and/or a modified biomonitoring protocol.

Failure to conduct an adequate TRE, or failure to submit a plan or program as described above, or the submittal of a plan or program judged inadequate by the Executive Secretary, shall be considered a violation of this permit.

17. Prohibition of Non-Storm Water Discharges. Except for process water discharges identified in this permit, the Statement of Basis, and the discharges identified later in this paragraph, additional discharges from this facility are limited to storm water only. The following non-storm water discharges may be authorized by this permit to be discharged with storm water discharges provided the non-storm water component of the discharge is in compliance with *Part I.E.5.h.* (Measures and Controls for Non-storm Water Discharges): discharges from fire fighting activities; fire hydrant flushings; potable water sources including waterline flushings; irrigation drainage; lawn watering; routine external building washdown which does not use detergents or other compounds; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

- E. Storm Water Pollution Prevention Plan. It has been determined that the permittee has a regulated storm water discharge as per *UAC R317.8*. Therefore, the permittee shall develop a storm water pollution prevention plan. However, if the permittee has provided storm runoff containment for the 25 year, 24 hour storm for new facilities or containment for the 10 year, 24 hour storm for existing facilities, the storm water pollution prevention plan may be modified for that portion of the facility. The plan shall be prepared and retained according to the following conditions:

1. Deadlines for Plan Preparation and Compliance. The storm water pollution prevention plan required under *Part I.E.* shall be prepared and implemented by November 1, 1995, unless the *Executive Secretary* gives written approval extending the implementation time for parts of the plan.
2. Signature and Plan Review
 - a. The plan shall be signed in accordance with *Part IV.G.* (Signatory Requirements), and be retained on site at the facility which generates the storm water discharge.
 - b. The permittee shall make plans available upon request to the *Executive Secretary*, or authorized representative.
 - c. Required modifications. The *Executive Secretary* may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this part. Such notification shall identify those provisions of the permit that are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this part. Within 30 days of such notification from the *Executive Secretary* the permittee shall make the required changes to the plan and shall submit to *Executive Secretary* a written certification that the requested changes have been made.
3. Pollution Prevention Team. The plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.
4. Description of Potential Pollutant Sources. The plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. The plan shall identify all activities and significant materials which may potentially be significant pollutant sources. The plan shall include, at a minimum:
 - a. Drainage.
 - (1) A site map indicating, an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes such as spent solvents or baths sands, slag or dross, liquid storage tanks or drums, processing areas including pollution control equipment such as baghouses, and storage areas of raw materials such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. This list shall also include a description of areas of the facility where

settling or deposition of particulate matter from processing operations such as furnace or oven emissions is likely.

- (2) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants the permittee shall make a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced or discharged; the potential of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.
- b. Inventory of Exposed Materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation and discharged to surface or groundwater. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the date of the issuance of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of three years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives. This description should also include areas with the potential for deposition of particulate matter from process air emissions or losses during material handling activities. The description shall be updated whenever there is a significant change in the type or quantity of exposed materials, or material management practices, that may affect the exposure of materials to storm water.

A summary of any existing ore or waste rock/overburden characterization data, including results of testing for acid rock generation potential for discharge locations other than 001 or 002. If the ore or waste rock/overburden characterization data is updated due to a change in the ore type being mined, the storm water pollution prevention plan shall be updated with the new data.
 - c. Spills and Leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas covered by this plan that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of three years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.
 - d. Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.
 - e. Risk Identification and Summary of Potential Pollutant Sources. A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes occurring indoors or out, with or

without pollution control equipment; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g. chemical oxygen demand, ammonia, oil and grease, copper, lead, zinc, etc.) of concerns shall be identified.

5. Measures and Controls. The Permittee shall develop a description of storm water management controls appropriate for the facility and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

- a. Good housekeeping. Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner. The pollution prevention plan should consider implementation of the following measures where applicable.
 - (1) Establish a cleaning or maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, particularly areas of material loading/unloading, material storage and handling, and processing.
 - (2) Pave areas of vehicle traffic or material storage where vegetative or other stabilization methods are not practical. Institute sweeping programs in these areas as well.
 - (3) For unstabilized areas of the facility where sweeping is not practical, storm water management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures, that effectively trap or remove sediment should be considered.
- b. Source Controls. The permittee shall consider preventive measures to minimize the potential exposure of all significant materials (as described in Part I.E.4 of this section) to precipitation and storm water runoff. The permittee should consider in a narrative description the implementation of the following measures to reduce the exposure of all materials to storm water:
 - (1) Relocating all materials, including raw materials, intermediate products, material handling equipment, obsolete equipment, and wastes currently stored outside to inside locations.
 - (2) Establishment of a schedule for removal of wastes and obsolete equipment to minimize the volume of these materials stored onsite that may be exposed to storm water.
 - (3) Substitution of less hazardous materials, or materials less likely to contaminate storm water, or substitution of recyclable materials for nonrecyclables wherever possible.
 - (4) Constructing permanent or semipermanent covers, or other similar forms of protection over stockpiled materials, material handling and processing equipment.

Options include roofs, tarps, and covers. This may also include the use of containment bins or covered dumpsters for raw materials, waste materials and nonrecyclable waste materials.

- (5) Dikes, berms, curbs, trenches, or other equivalent measures to divert runoff from material storage, processing, or waste disposal areas.
- c. Preventive Maintenance. A preventive maintenance program shall involve inspection and maintenance of storm water management devices (e.g. cleaning oil/water separators, catch basins, particulate emission control equipment) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.
- d. Spill Prevention and Response Procedures. Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.
- e. Inspections. In addition to or as part of the comprehensive site evaluation required under this permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals such as quarterly for major equipment as specified in the plan. A set of tracking or follow up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.
- f. Employee Training. Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training. In all cases training must be held at least annually.
- g. Recordkeeping and Internal Reporting Procedures. A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.
- h. Non-Storm Discharges.
 - (1) The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. All process water discharged at outfalls 001, 002, 005, 007, 009, 010 and identified in the Statement

of Basis are considered evaluated for the purpose of this certification. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. The certification must be signed in accordance with signatory requirements in *Part IV.G Signatory Requirements* of this permit. A discharger that is unable to provide the certification required by this paragraph must notify the *Executive Secretary*.

- (2) Except for flows from fire fighting activities, sources of non-storm water that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.
 - (3) Failure to Certify. Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the Director by June 30, 1995. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: The procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate test from such storm sewers were not feasible. Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful, and must be terminated.
- i. Sediment and Erosion Control. The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to limit erosion. The plan shall also contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see paragraph Part I.E.4 of this section (Description of Potential Pollutant Sources) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected water (such as for a process or irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.
 - j. Management of Runoff. Facilities shall consider implementation of the following storm water management practices to address pollutants of concern:
 - (1) Vegetative buffer strips, filter fabric fence, sediment filtering boom, or other equivalent measures, that effectively trap or remove sediment prior to discharge through an inlet or catch basin.

- (2) Media filtration such as catch basin filters and sand filters.
- (3) Oil/water separators or the equivalent.
- (4) Structural BMPs such as settling basins, sediment traps, retention or detention ponds, recycling ponds or other equivalent measures.

Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

6. Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall provide:

- a. Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
- b. Based on the results of the inspection, the description of potential pollutant sources identified in the plan and pollution prevention measures and controls identified in the plan shall be proposed as appropriate within two weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, normally within twelve weeks after the inspection. A longer time period may be approved by the Executive Secretary when justified by the permittee.
- c. A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken shall be made and retained as part of the storm water pollution prevention plan for at least one year after this permit terminates. The report shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with *Part IV.G Signatory Requirements* of this permit.

Where significant settling or deposition from process emissions are observed during proper operation of existing equipment, the permittee shall consider ways to reduce these emissions including but not limited to: Upgrading or replacing existing equipment; collecting runoff from areas of deposition for treatment or recycling; or changes in materials or processes to reduce the generation of particulate matter.

- d. Where compliance evaluation schedules overlap with inspections required under Part I.E.5.e., the compliance evaluation may be conducted in place of one such inspection.
7. Consistency with other plans. Storm water pollution prevention plans may reflect requirements for *Spill Prevention Control and Countermeasure ("SPCC")* plans developed for the facility under *Section 311* of the CWA or *Best Management Practices ("BMP")* otherwise required by this permit for the facility as long as such requirement is referenced in the storm water pollution prevention plan.
8. Additional Requirements for Salt Storage. Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to a waters of the State shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. Dischargers shall demonstrate compliance with this provision as expeditiously as practicable, but in no event later than October 1, 1995.
9. Monitoring Requirements: During the period beginning on the effective date and lasting through the expiration date of this permit storm events greater than 0.1 inches and more then 72 hours after the previous measurable storm at sites 004, SW1, SW2, SW3, and SW 4 shall be monitored at least 2 times per year, and sampled if discharge is present, for the same appropriate parameters as listed for the tailings impoundment outfall 001 in part I.D.1. except for cyanide, phenolics, coliforms, and biomonitoring. Where practical samples must be done by a grab sample in the first 30 minutes of the observed discharge for pH, total metals and if a sheen is present oil & grease. In addition to the parameters listed the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled. Monitoring is not required after reclamation bond release or reclamation has reduced values to background levels.
10. Sampling Waiver. When unable to collect samples due to adverse climatic conditions, the discharger must submit in lieu of sampling data a description of why samples could not be collected, including available documentation of the event. Adverse weather conditions which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, electrical storms, etc.) or otherwise make the collection of a sample impractical (drought, extended frozen conditions, etc).
11. Reporting Monitoring results shall be reported with the monthly Discharge Monitoring Report within 60 days of sampling.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

- A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under *Part I* shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge. Sludge samples shall be collected at a location representative of the quality of sludge immediately prior to the use-disposal practice.
- B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under *Utah Administrative Code ("UAC") R317-2-10*, unless other test procedures have been specified in this permit.
- C. Penalties for Tampering. The *Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- D. Reporting of Monitoring Results. Monitoring results obtained during the previous month shall be summarized for each month and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), post-marked no later than the 28th day of the month following the completed reporting period. The first report is due on March 28, 1995. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports including whole effluent toxicity (WET) test reports required herein, shall be signed and certified in accordance with the requirements of *Signatory Requirements (see Part IV.G)*, and submitted to the Director, Division of Water Quality and to EPA at the following addresses:

original to: Department of Environmental Quality
Division of Water Quality
288 North 1460 West
PO Box 144870
Salt Lake City, Utah 84114-4870

copy to: United States Environmental Protection Agency Region VIII
Water Management Division
NPDES Branch (8WM-C)
999 18th Street, Suite 500
Denver, Colorado 80202-2466

- E. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.
- F. Additional Monitoring by the Permittee. If the permittee monitors any parameter more frequently than required by this permit, using test procedures approved under *UAC R317-2-10* or as otherwise specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated. Only those parameters required by the permit need to be reported.

- G. Records Contents. Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
 2. The individual(s) who performed the sampling or measurements;
 3. The date(s) and time(s) analyses were performed;
 4. The individual(s) who performed the analyses;
 5. The analytical techniques or methods used; and,
 6. The results of such analyses.
- H. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Executive Secretary at any time. A copy of this UPDES permit must be maintained on site during the duration of activity at the permitted location.
- I. Twenty-four Hour Notice of Noncompliance Reporting.
1. The permittee shall (orally) report any noncompliance which may seriously endanger health or environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality, (801) 538-6146, or 24 hour answering service (801) 536-4123.
 2. The following occurrences of noncompliance shall be reported by telephone (801) 536-4123 as soon as possible but no later than 24 hours from the time the permittee becomes aware of the circumstances:
 - a. Any noncompliance which may endanger health or the environment;
 - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See *Part III.G, Bypass of Treatment Facilities.*);
 - c. Any upset which exceeds any effluent limitation in the permit (See *Part III.H, Upset Conditions.*); or,
 - d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit.
 3. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected; and,

- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - e. Steps taken, if any, to mitigate the adverse impacts on the environment and human health during the noncompliance period.
- 4. The Executive Secretary may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Division of Water Quality, (801) 538-6146.
 - 5. Reports shall be submitted to the addresses in *Part II.D, Reporting of Monitoring Results*.
- J. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for *Part II.D* are submitted. The reports shall contain the information listed in *Part II.I.3*.
 - K. Inspection and Entry. The permittee shall allow the Executive Secretary, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
 - 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
 - 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
 - 4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the *Act*, any substances or parameters at any location.

III. COMPLIANCE RESPONSIBILITIES

- A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Executive Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- B. Penalties for Violations of Permit Conditions. The Act provides that any person who violates a permit condition implementing provisions of the Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions of the Act is subject to a fine not exceeding \$25,000 per day of violation; Any person convicted under *UCA 19-5-115(2)* a second time shall be punished by a fine not exceeding \$50,000 per day. Except as provided at *Part III.G, Bypass of Treatment Facilities* and *Part III.H, Upset Conditions*, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- F. Removed Substances. Collected screening, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not directly enter either the final effluent or waters of the state by any other direct route.
- G. Bypass of Treatment Facilities.
1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this section. Return of removed substances, as described in *Part III.F*, to the discharge stream shall not be considered a bypass under the provisions of this paragraph.
 2. Notice:
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.

- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under *Part II.I, Twenty-four Hour Reporting*.
- 3. Prohibition of bypass.
 - a. Bypass is prohibited and the Executive Secretary may take enforcement action against a permittee for a bypass, unless:
 - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage ;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,
 - (3) The permittee submitted notices as required under paragraph 2 of this section.
 - b. The Executive Secretary may approve an anticipated bypass, after considering its adverse effects, if the Executive Secretary determines that it will meet the three conditions listed above in paragraph 3.a of this section.

H. Upset Conditions.

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph 2. of this section are met. Executive Secretary's administrative determination regarding a claim of upset cannot be judiciously challenged by the permittee until such time as an action is initiated for noncompliance.
- 2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required under *Part II.I, Twenty-four Hour Notice of Noncompliance Reporting*; and,
 - d. The permittee complied with any remedial measures required under *Part III.D, Duty to Mitigate*.
- 3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

- I. Toxic Pollutants. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of *The Water Quality Act of 1987* for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- J. Changes in Discharge of Toxic Substances. Notification shall be provided to the Executive Secretary as soon as the permittee knows of, or has reason to believe:
1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 ug/L);
 - b. Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(7)* or (10); or,
 - d. The level established by the Executive Secretary in accordance with *UAC R317-8-4.2(6)*.
 2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. Five hundred micrograms per liter (500 ug/L);
 - b. One milligram per liter (1 mg/L) for antimony;
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(9)*; or,
 - d. The level established by the Executive Secretary in accordance with *UAC R317-8-4.2(6)*.
- K. Industrial Pretreatment. Any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of *The Water Quality Act of 1987*, the permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at *40 CFR 403*, the State Pretreatment Requirements at *UAC R317-8-8*, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the wastewaters.

In addition, in accordance with *40 CFR 403.12(p)(1)*, the permittee must notify the POTW, the EPA Regional Waste Management Director, and the State hazardous waste authorities, in writing, if they discharge any substance into a POTW which if otherwise disposed of would be considered a hazardous waste under *40 CFR 261*. This notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch).

IV. GENERAL REQUIREMENTS

- A. Planned Changes. The permittee shall give notice to the Executive Secretary as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit. In addition, if there are any planned substantial changes to the permittee's existing sludge facilities or their manner of operation or to current sludge management practices of storage and disposal, the permittee shall give notice to the Executive Secretary of any planned changes at least 30 days prior to their implementation.
- B. Anticipated Noncompliance. The permittee shall give advance notice to the Executive Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- C. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- D. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit.
- E. Duty to Provide Information. The permittee shall furnish to the Executive Secretary, within a reasonable time, any information which the Executive Secretary may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Executive Secretary, upon request, copies of records required to be kept by this permit.
- F. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Executive Secretary, it shall promptly submit such facts or information.
- G. Signatory Requirements. All applications, reports or information submitted to the Executive Secretary shall be signed and certified.
1. All permit applications shall be signed by either a principal executive officer or ranking elected official.
 2. All reports required by the permit and other information requested by the Executive Secretary shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Executive Secretary, and,
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having

overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to authorization. If an authorization under paragraph IV.G.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph IV.G.2 must be submitted to the Executive Secretary prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- H. Penalties for Falsification of Reports. The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both.
- I. Availability of Reports. Except for data determined to be confidential under UAC R317-8-3.2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of Executive Secretary. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.
- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the permittee of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the Act.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- M. Transfers. This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Executive Secretary at least 20 days in advance of the proposed transfer date;
 2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
 3. The Executive Secretary does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- N. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by *UCA 19-5-117*.
- O. Water Quality-Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:
1. Water Quality Standards for the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
 2. A final wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.
 3. A revision to the current Water Quality Management Plan is approved and adopted which calls for different effluent limitations than contained in this permit.
- P. Toxicity Limitation -Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include, whole effluent toxicity (WET) limitations, a compliance date, a compliance schedule, a change in the whole effluent toxicity (biomonitoring) protocol, additional or modified numerical limitations, or any other conditions related to the control of toxicants if one or more of the following events occur:
1. Toxicity is detected, as per Part I, D.12 of this permit, during the duration of this permit.
 2. The TRE results indicate that compliance with the toxic limits will require an implementation schedule past the date for compliance and the Executive Secretary agrees with the conclusion.
 3. The TRE results indicate that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits, and the Executive Secretary agrees that numerical controls are the most appropriate course of action.
 4. Following the implementation of numerical control(s) of toxicant(s), the Executive Secretary agrees that a modified biomonitoring protocol is necessary to compensate for those toxicants that are controlled numerically.
 5. The TRE reveals other unique conditions or characteristics which, in the opinion of the Executive Secretary, justify the incorporation of unanticipated special conditions in the permit.